Attorney Docket No.: 5308-413 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Saxler et al.
Application No.: 10/849,617
Filed: May 20, 2004
Confirmation No.: 9882
Group Art Unit: 2822
Examiner: Amir Zarabian
For: **METHODS OF FABRICATING NITRIDE-BASED TRANSISTORS HAVING REGROWN OHMIC CONTACT REGIONS AND NITRIDE-BASED TRANSISTORS HAVING REGROWN OHMIC CONTACT REGIONS**

Date: June 14, 2005

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the amendment by the U.S. Patent and Trademark Office to 37 C.F.R. § 1.98(a)(2)(ii) effective October 21, 2004. Also enclosed is a translation or a concise explanation of each non-English language document enclosed. It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. §1.56 and Section 609 of the MPEP.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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CERTIFICATE OF MAILING UNDER 37 CFR 1.8

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Substitute form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known	
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Filing Date	May 20, 2004
First Named Inventor	Saxler et al.
Group Art Unit	2822
Examiner Name	Amir Zarabian
Attorney Docket Number	5308-413

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document Number	U.S. Patent Document Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	1.	US-6,150,680		Eastman et al.	11-21-2000
	2.	US-6,086,673		Molnar	07-11-2000
	3.	US-5,686,737		Allen	11-11-1997
	4.	US-4,755,867		Cheng	07-05-1988
	5.	US-2004/0241970	A1	Ring	12-02-2004
	6.	US-2003/0123829	A1	Taylor	07-03-2003
	7.	US-2002/0167023	A1	Charvarkar et al.	11-14-2002
	8.	US-2002/0008241	A1	Edmond et al.	01-24-2002

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document Office	Foreign Patent Document Number	Foreign Patent Document Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
	9.	EP	0 334 006	A1	Siemens AG	09-27-1989	
	10.	JP	2004-342810		Fujitsu Ltd.	12-02-2004	Abstract
	11.	JP	11261053		Furukawa Elecric Co. Ltd.	09-24-1999	Abstract
	12.	PCT	WO 04/008495		Cree, Inc.	01-22-2004	

OTHER NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
	13.	Ando et al., "10-W/mm AlGaN-GaN HFET With a Field Modulating Plate," *IEEE Electron Device Letters*, 24(5), pp. 289-291 (May 2003).	
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	17.	Coffie et al., "Unpassivated p-GaN/AlGaN/GaN HEMTs with 7.1 W/MMF at 10 GHz, *Electronic Letters online No. 20030872*, 39(19), (September 18, 2003).	
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Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	20.	Kanaev et al., "Femtosecond and Ultraviolet Laser Irradiation of Graphitelike Hexagonal Boron Nitride," *Journal of Applied Physics*, 96(8), pp. 4483-4489 (Oct. 15, 2004).	
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	29.	Parikh et al., "Development of Gallium Nitride Epitaxy and Associated Material-Device Correlation for RF, Microwave and MM-wave Applications," Cree, Inc. (35 slides).	
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	31.	Shiojima et al., "Improved Carrier Confinement by a Buried p-Layer in the AlGaN/GaN HEMT Structure," *IEICE Trans. Electron.*, E83-C(12), (December 2000).	
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	33.	Tilak et al., "Influence of Barrier Thickness on the High-Power Performance of AlGaN/GaN HEMTs," *IEEE Electron Device Letters*, 22(11), pp. 504-506 (Nov. 2001).	
	34.	United States Patent Application entitled "Improved Dielectric Passivation for Semiconductor Devices," Serial No. 10/851,507, filed May 22, 2004 (Cree Docket No. P0274).	
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	36.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," Serial No. 10/897,726, filed July 23, 2004 (Attorney Docket No. 5308-392).	
	37.	United States Patent Application entitled "High Power Density and/or Linearity Transistors," Serial No. 11/005,107, filed December 6, 2004 (Attorney Docket No. 5308-511).	
	38.	United States Patent Application entitled "Field Effect Transistors (FETS) Having Multi-Watt Output Power at Millimeter-Wave Frequencies," Serial No. 11/005,423, filed December 6, 2004 (Attorney Docket No. 5308-512).	
	39.	United States Patent Application entitled "Group III Nitride Field Effect Transistors (FETs) Capable of Withstanding High Temperature Reverse Bias Test Conditions," Serial No. 11/080,905, filed March 15, 2005 (Attorney Docket No. 5308-516).	
	40.	United States Patent Application entitled "Aluminum Free Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,575, filed April 29, 2005 (Attorney Docket No. 5308-543).	
	41.	United States Patent Application entitled "Binary Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,675, filed April 29, 2005 (Attorney Docket No. 5308-544).	

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	42.	United States Patent Application entitled "Composite Substrates of Conductive And Insulating or Semi-Insulating Group III-Nitrides For Group III-Nitride Devices," Serial No. 11/103,127, filed April 11, 2005 (Attorney Docket No. 5308-551).	
	43.	United States Patent Application entitled "Thick Semi-Insulating or Insulating Epitaxial Gallium Nitride Layers and Devices Incorporating Same," Serial No. 11/103,117, filed April 11, 2005 (Attorney Docket No. 5308-553).	
	44.	United States Patent Application entitled "Cap Layers and/or Passivation Layers for Nitride-Based Transistors, Transistor Structures and Methods of Fabricating Same," Serial No. 10/996,249, filed November 23, 2004 (Attorney Docket No. 5308-373).	
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	52.	Yu et al., "Schottky Barrier Engineering in III-V Nitrides via the Piezoelectric Effect," *Applied Physics Letters*, 73(13), pp. 1880-1882 (Sept. 28, 1998).	
	53.	Zhang et al., "High Breakdown GaN HEMT with Overlapping Gate Structure," *IEEE Electron Device Letters*, 21(9), pp. 421-423 (September 2000).	

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